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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant: Houghton et al.

Serial No.: 09/627,694

Examiner: A. Harris TECH CENTER 1600/2900

Filed: 28 July 2000

Art Unit: 1642

For: Method and Compositions for Stimulation of an Immune Response to  
Differentiation Antigen Induced by Altered Differentiation AntigenRESPONSE TO OFFICIAL ACTION

This is in response to the Official Action mailed May 16, 2001 for the above-captioned application. Reconsideration of the application in view of the remarks herein are respectfully requested.

Claims 1-40 are pending in this application. The Examiner considered only claims 29-33 pursuant to a restriction requirement. Applicants filed a Petition Under Rule 1.144 on July 25, 2001 seeking consideration of additional claims.

The Examiner rejected claims 29-31, asserting that the term "differentiation antigen" is indefinite. Applicants submit that this term is one which is established in the art, and submit herewith a Declaration Under Rule 132 relating to this issue. As explained therein, the term "differentiation antigen" refers to any marker (or antigen) that is detectable by immunological procedures and that distinguishes one cell lineage from another or different stages within a cell lineage. The term has been in use for many years, and was first used to describe markers used to characterize lymphocytes. Thus, CD4 is a differentiation antigen on T lymphocytes because it differentiates T cells from

I hereby certify that this paper and any attachments named herein are being deposited with the US Postal Service as first-class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231  
on August 6, 2001

Marina T. Larson  
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August 6, 2001  
Date of Signature

other cell lineages (like B cells) and is a marker for stages of T cell differentiation. The specification of the above-captioned application provides many additional examples of specific "differentiation antigens."

Furthermore, the term "differentiation antigen" is defined in various sources, including the web site having the URL:

<http://www-micro.msb.le.ac.uk/MBChB/ImmGloss.html>

where "differentiation antigen" is defined as "a cell surface antigenic determinant found only on cells of a certain lineage and at a particular developmental stage; used as an immunologic marker." A copy of the relevant portion of this page is attached AS Exhibit A. In addition, the term "differentiation antigen" is used in a number of issued US patents, including US Patents Nos. 5,066,581 entitled "Differentiation antigen, NDA.sub.3, associated with the receptor for B cell growth factor"; 5,204,451 entitled "Activating hydroxyl groups of polymeric carriers using 4-fluorobenzenesulfonyl chloride for binding biologically active ligands"; 5,455,031 entitled "Polypeptide with 46 Kdalton HMFG differentiation antigen binding specificity, composition, kit and diagnostic method"; and 5,681,566 entitled "Antibody conjugates with two or more covalently linked FC regions".

In view of the fact that the term "differentiation antigen" is well known in the art, Applicants submit that a person skilled in the art would have no difficulty understanding the scope of the claims. The rejection under 35 USC § 112, second paragraph should therefore be withdrawn.

The Examiner also rejected claims 29-33 under 35 USC § 103 as obvious over the combination of Naftzger et al. and Ausubel. In connection with this rejection, the Examiner indicates that priority has only been granted as of December 10, 1997 (the PCT filing date) because the files for the provisional applications cannot be located. In the Office Action and during a telephone interview, the Examiner indicated that this issue would be revisited once the files were located. If there is anything that Applicants can do to assist with this review, the Examiner should so advise.

In view of the foregoing, Applicants submit that claims 29-33 are in form for allowance. Furthermore, as reflected in the Petition filed under Rule 1.144, additional claims should be examined in this application. Consideration of appropriate claims after the ruling on the petition is also requested.

Respectfully submitted,

A handwritten signature in cursive script, reading "Marina T. Larson". The signature is written in black ink and is positioned above the printed name and contact information.

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